

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT

Docket Number

10020/30101.

Application Number 10/680,066

Filing Date October 6, 2003 Examiner Not Yet Assigned

Art Unit Not Yet Assigned

Invention Title

ORGANIC LIGHT EMITTING DEVICES WITH WIDE GAP HOST MATERIALS

Inventor(s) REN et al.

Address to:

Commissioner for Patents

P.O.-Box 1450

Alexandria, VA 22313-1450

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Thomas F. Meagher (Reg.

- In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance 1. with the procedures of 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicants hereby bring the following references to the attention of the Examiner. The references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).
- Copies of each patent, publication or other information listed on the modified PTO form 2. 1449 are enclosed, unless otherwise indicated.
- It is believed that no fees are due in connection with this Information Disclosure 3. Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for such fees. A copy of this communication is enclosed for charging purposes.

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F EXAMINER OF	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
	Loy et al., "Asymmetric triaryldiamines as thermally stable hole transporting layers for organic light-emitting devices," Chem. Mater. 10, 2235 (1998)
	Adamovich et al., "High efficiency single dopant white electrophosphorescent light emitting diodes," New J. Chem. 26, 1171 (2002)
	Yamamoto et al., "Palladium-catalyzed synthesis of triarylamines from aryl halides and diarylamines," Tet. Lett., 1998 39, 2367-2370
	H. Gilman et al., "Steric hindrance in highly-substituted organosilicon compounds. I. The reaction of aryllithium compounds with some chlorosilanes, ethoxysilanes, and related compounds," J. Org. Chem 15, 720 (1950)
	Charisse et al., "Tetraayl-methane analogues in group 14-v. Distortion of tetrahedral geometry in terms of through-space π - π and π - σ interactions and NMR sagging in terms of π - σ * charge transfer," Polyhedron 17, 4497 (1998)
 	I. G. Hill, "Organic semiconductor heterointerfaces containing bathocuproine," J. Appl. Phys. 86, 4515 (1999)
	Jutzi, Chemische Berichte 1971, 104(5), pp. 1455-67.
	Gilman et al., "Cyclic Organosilicon Compounds. I. Synthesis of Compounds Containing the Dibenzosilole Nucleus", J. Am. Chem. Soc., April 20, 1958, 80 pp. 1883-6.
	Forrest et al., "Measuring the efficiency of organic light-emitting devices**,"Adv. Mater. 15, 1043 (2003)
 • 	Patent Application Serial No. 09/931,948 to Lu et al., filed August 20, 2001. *
	Patent Application Serial No. 10/233,470, to Shtein et al filed September 4, 2002.*
si .	Patent Application Serial No. 10/295,808, to Kwong et al., filed November 15, 2002.*

^{* -} A copy is not enclosed in accordance with the notice in the Official Gazette dated August 5, 2003.

EXAMINER	DATE CONSIDERED		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M not considered. Include copy of this form with next communication to applicant.	1.P.E.P. 609; draw line through citation if not in conformance and		

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STATEMENT BY APPLICANT PTO-1449

DOCKET NO. 10020/30101	SERIAL NO. 10/680,066
APPLICANT REN et al.	
FILING DATE October 6, 2003	GROUP Not Yet Assigned

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT/ PUBLICATION NUMBER	PATENT/PUBLICATION DATE	NAME	CLASS	SUBCLASS	FILING DATE
•	4,769,292	September 6, 1988	Tang et al.			
	5,703,436	December 30, 1997	Forrest et al.			ļ
7	5,707,745	January 13, 1998	Forrest et al.			
	5,834,893	November 10, 1998	Bulovic et al.			
	5,844,363	December 1, 1998	Gu et al.			
	6,013,982	January 11, 2000	Thompson et al.			
	6,087,196	July 11, 2000	Sturm et al.			
	6,091,195	July 18, 2000	Forrest et al.			
	6,097,147	August 1, 2000	Baldo et al.			
	6,294,398	September 25, 2001	Kim et al.			<u>. </u>
	6,303,238	October 16, 2001	Thompson et al.			
	6,337,102	January 8, 2002	Forrest et al.			
	6,468,819	October 22, 2002	Kim et al.			
	6,548,956	April 15, 2003	Forrest et al.			
	5,247,190	September 21, 1993	Friend et al.			
	2003/0230980	December 18, 2003	Forrest et al.			

FOREIGN PATENT DOCUMENTS

						TRANSL	ATION
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
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OTHER DOCUMENTS

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
	Baldo et al., "Highly Efficient Phosphorescent Emission from Organic Electroluminescent Devices," Nature, vol. 395, 151-154, 1998.
	Baldo et al., "Very High-Efficiency Green Organic Light-Emitting Devices Based on Electrophosphorescence," Appl. Phys. Lett., vol. 75, No. 3, 4-6 (1999)
	Adachi et al., "Nearly 100% Internal Phosphorescent Efficiency in an Organic Light Emitting Device," J. Appl. Phys., 90, 5048 (2001)
	Scher et al., "Anomalous transit-time dispersion in amorphous solids," Phys. Rev. B 1975, 12(b), 2455
	Gailberger et al., "DC and transient photoconductivity of poly(2-phenyl-,4-phenylenevinylene," Phys. Rev. B 1991, 44 (16), 8643
	Hertel et al., "Charge carrier transport in conjugated polymers," J. Chem. Phys. 1999, 110(18), 9214
	Chen et al., "Improved time-of-flight technique for measuring carrier mobility in thin films of organic Electroluminescent materials," Jpn. J. Appl. Phys. 2000, 39, 1190